

**FEDERALLY ENFORCEABLE STATE
OPERATING PERMIT (FESOP)
OFFICE OF AIR MANAGEMENT**

**Wallace Construction, Inc. d/b/a WAP Company
9790 Old State Road 37 North
Martinsville, Indiana 46151**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F 109-11546-03229	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

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SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary hot mix batch asphalt production source.

Authorized individual:	Richard Wallace
Source Address:	9790 Old State 37 North, Martinsville, Indiana 46151
Mailing Address:	9790 Old State 37 North, Martinsville, Indiana 46151
Phone Number:	317-422-5356
SIC Code:	2951
County Location:	Morgan
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP) Minor Source, under PSD Rules; Minor Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) batch mixer, known as EU B-1, installed in 1965, equipped with a cyclone and a wet scrubber, connected in series, installed in 1965, exhausted through Stack S-1, capacity of 250 tons of asphalt per hour.
- (b) One (1) No. 4 distillate oil-fired dryer/burner, known as EU B-2, installed in 1965 and replaced in kind in 1999 due to age, exhausted through Stack S-1, rated at 75.0 million British thermal units per hour.
- (c) One (1) No. 2 distillate hot oil heater, installed in 1999 rated at 2.0 million British thermal units per hour.
- (d) One (1) storage tank, known as V-4, installed in the 1970's in Coral 2, capacity: 20,000 gallons of liquid asphalt.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Propane for liquefied petroleum gas, or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) British thermal units per hour.
- (b) Fuel oil-fired combustion sources with heat input equal to or less than two million (2,000,000) British thermal units per hour and firing fuel containing less than five-tenths (0.5) percent sulfur by weight.

- (c) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons: one (1) storage tank, known as V-3, installed 1998 in Coral 1, capacity: 500 gallons of gasoline and two (2) storage tanks, known as V-5 and V-6, installed in 1970's in Coral 2, capacity: 7,000 gallons of diesel oil and 6,000 gallons of No. 4 refined fuel oil, respectively.
- (d) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month: two (2) storage tanks, known as V-1 and V-2, installed 1998 in Coral 1, capacity: 2,000 gallons of diesel oil and 1,000 gallons of diesel oil, respectively.
- (e) The following VOC and HAP storage containers: vessels storing lubricating oil, hydraulic oils, machining oils, and machining fluids.
- (f) Application of oils, greases lubricants or other nonvolatile materials applied as temporary protective coatings.
- (g) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (h) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (i) Paved roads and parking lots with public access.

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) for a Federally Enforceable State Operating Permit (FESOP).

A.5 Prior Permit Conditions

- (a) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits.
- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAM, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued.

SECTION B

GENERAL CONDITIONS

B.1 Permit No Defense [IC 13]

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

B.2 Definitions [326 IAC 2-8-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2, and 326 IAC 2-7) shall prevail.

B.3 Permit Term [326 IAC 2-8-4(2)]

This permit is issued for a fixed term of five (5) years from the effective date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3.

B.4 Enforceability [326 IAC 2-8-6]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.5 Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

B.6 Severability [326 IAC 2-8-4(4)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

B.8 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)]

- (a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall furnish to IDEM, OAM, within a reasonable time, any information that IDEM, OAM, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) Upon request, the Permittee shall also furnish to IDEM, OAM, copies of records required to be kept by this permit. The Permittee may include a claim of confidentiality in accordance with 326 IAC 17. If requested by IDEM, OAM, or the U.S. EPA, to furnish copies of requested records directly to U. S. EPA, then the Permittee must furnish record directly to the U. S. EPA. The Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAM, may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit, except those specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act and is grounds for:
 - (1) Enforcement action;
 - (2) Permit termination, revocation and reissuance, or modification; and
 - (3) Denial of a permit renewal application.
- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a authorized individual of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, on the attached Certification Form, with each submittal.
- (c) An authorized individual is defined at 326 IAC 2-1.1-1(1).

B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The certification shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, and on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
 - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was based on continuous or intermittent data;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
 - (5) Such other facts as specified in Sections D of this permit, IDEM, OAM, may require to determine the compliance status of the source.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.13 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The PMP and the PMP extension notification do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.

- (c) A copy of the PMPs shall be submitted to IDEM, OAM, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAM. IDEM, OAM, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.14 Emergency Provisions [326 IAC 2-8-12]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:

- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
- (2) The permitted facility was at the time being properly operated;
- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAM, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone No.: 1-800-451-6027 (ask for Office of Air Management, Compliance Section) or,
Telephone No.: 317-233-5674 (ask for Compliance Section)
Facsimile No.: 317-233-5967

Failure to notify IDEM, OAM, by telephone or facsimile within four (4) daytime business hours after the beginning of the emergency, or after the emergency is discovered or reasonably should have been discovered, shall constitute a violation of 326 IAC 2-8 and any other applicable rules. [326 IAC 2-8-12(f)]

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted notice either in writing or facsimile, of the emergency to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions) for sources subject to this rule after the effective date of this rule. This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAM, may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAM, by telephone or facsimile of an emergency lasting more than one (1) hour in compliance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
 - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within ten (10) calendar days from the date of the discovery of the deviation, except for the failure to perform the monitoring or record the information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
- (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
 - (2) An emergency as defined in 326 IAC 2-7-1(12); or
 - (3) Failure to implement elements of the Preventive Maintenance Plan unless such failure has caused or contributed to a deviation.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

- (c) Written notification shall be submitted on the attached Emergency/Deviation Occurrence Reporting Form or its substantial equivalent. The notification does not need to be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAM, determines any of the following:
- (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]
- (c) Proceedings by IDEM, OAM, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]

- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAM, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAM, may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.17 Permit Renewal [326 IAC 2-8-3(h)]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAM, and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]
 - (1) A timely renewal application is one that is:
 - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.
 - (2) If IDEM, OAM, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-8-9]

If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAM, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAM, any additional information identified as needed to process the application.

B.18 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1) only if a certification is required by the terms of the applicable rule.

- (c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.19 Operational Flexibility [326 IAC 2-8-15]

- (a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
- (2) Any approval required by 326 IAC 2-8-11.1 has been obtained;
- (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

- (5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM, OAM, in the notices specified in 326 IAC 2-8-15(b), (c)(1), and (d).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-8-15(a) and the following additional conditions:

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

- (c) Emission Trades [326 IAC 2-8-15(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).
- (d) Alternative Operating Scenarios [326 IAC 2-8-15(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAM or U.S. EPA is required.

B.20 Permit Revision Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed by the applicable provisions of 326 IAC 2-8-11.1.

B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAM, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.
[326 IAC 2-8-5(a)(4)]

B.22 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-11(b)(3)]

B.23 Annual Fee Payment [326 IAC 2-8-4(6)] [326 IAC 2-8-16]

- (a) The Permittee shall pay annual fees to IDEM, OAM, within thirty (30) calendar days of receipt of a billing. If the Permittee does not receive a bill from IDEM, OAM the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAM, Technical Support and Modeling Section), to determine the appropriate permit fee.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

C.1 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

- (1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period. This limitation shall also satisfy the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD));
- (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
- (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(b) Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), emissions of particulate matter (PM) from the entire source shall be limited to less than two hundred fifty (250) tons per twelve (12) consecutive month period.

(c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided the source's potential to emit does not exceed the above specified limits.

(d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accord-

ance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3(a)(2)(A) and (B) are not federally enforceable.

C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and in 326 IAC 9-1-2. 326 IAC 9-1-2 is not federally enforceable.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted on November 15, 1999. The plan does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1). The plan consists of:

- (a) Applying water to stockpiles, feed and intermediate points and at loading and unloading points on an as-needed basis,
- (b) Minimizing the distance between transfer points and minimizing the fall distances and discharge rates in loading and unloading of aggregate,
- (c) Maintaining a minimum size and number of stock piles, and
- (d) Tarping of material during transportation.
- (e) The requirement from OP 99-07-90-03229 issued October 26, 1986, Condition 7, requiring that the plant road be paved is not applicable since all plant roads have been paved.

C.7 Operation of Equipment [326 IAC 2-8-5(a)(4)]

Except as otherwise provided in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.8 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

C.9 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

- (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
- (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notifications do not require a certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

Testing Requirements [326 IAC 2-8-4(3)]

C.10 Performance Testing [326 IAC 3-6]

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall notify IDEM, OAM of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAM, within forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAM, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.11 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.12 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]

All monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule with full justification of the reasons for inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.

C.13 Monitoring Methods [326 IAC 3]

Any monitoring or testing performed required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

C.14 Pressure and Flow Gauge Specifications

Whenever a condition in this permit requires the measurement of water flow rate or pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be

accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.

Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.15 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within ninety (90) days from the date of issuance of this permit.

The ERP does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) If the ERP is disapproved by IDEM, OAM, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) Upon direct notification by IDEM, OAM, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.16 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

- (a) A compliance schedule for meeting the requirements of 40 CFR 68 by the date provided in 40 CFR 68.10(a); or
- (b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and
- (c) A verification to IDEM, OAM, that a RMP or a revised plan was prepared and submitted as required by 40 CFR 68.

All documents submitted pursuant to this condition shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

C.17 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. The compliance monitoring plan can be either an entirely new document, consist in whole information contained in other documents, or consist of a combination of new information and information contained in other documents. If the compliance monitoring plan incorporates by reference information contained in other documents, the Permittee shall identify as part of the compliance monitoring plan the documents in which the information is found. The elements of the compliance monitoring plan are:
 - (1) This condition;
 - (2) The Compliance Determination Requirements in Section D of this permit;
 - (3) The Compliance Monitoring Requirements in Section D of this permit;
 - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
 - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:
 - (A) Reasonable response steps that may be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
 - (B) A time schedule for taking reasonable response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to take reasonable response steps shall constitute a violation of the permit.
- (c) Upon investigation of a compliance monitoring excursion, the Permittee is excused from taking further response steps for any of the following reasons:
 - (1) A false reading occurs due to the malfunction of the monitoring equipment. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied; or
 - (3) An automatic measurement was taken when the process was not operating; or

- (4) The process has already returned or is returning to operating within “normal” parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (e) All monitoring required in Section D shall be performed at all times the equipment is operating. If monitoring is required by Section D and the equipment is not operating, then the Permittee may record the fact that the equipment is not operating or perform the required monitoring.
- (f) If for reasons beyond its control, the Permittee fails to perform the monitoring and record keeping as required by Section D, then the reasons for this must be recorded.
 - (1) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent of the operating time in any quarter.
 - (2) Temporary, unscheduled unavailability of qualified staff shall be considered a valid reason for failure to perform the monitoring or record keeping requirements in Section D.

C.18 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4] [326 IAC 2-8-5]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the corrective actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline.
- (c) IDEM, OAM reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do not require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.19 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

- (b) Records of required monitoring information shall include, where applicable:
 - (1) The date, place, and time of sampling or measurements;
 - (2) The dates analyses were performed;
 - (3) The company or entity performing the analyses;
 - (4) The analytic techniques or methods used;
 - (5) The results of such analyses; and
 - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
 - (1) Copies of all reports required by this permit;
 - (2) All original strip chart recordings for continuous monitoring instrumentation;
 - (3) All calibration and maintenance records;
 - (4) Records of preventive maintenance.
- (d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.20 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Quarterly Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported. The Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The report(s) does(do) not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) All instances of deviations as described in Section B- Deviations from Permit Requirements Conditions must be clearly identified in such reports. The Emergency/Deviation Occurrence Report does not require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).
- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

Stratospheric Ozone Protection

C.21 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156
- (b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

- (a) One (1) batch mixer, known as EU B-1, installed in 1965, equipped with a cyclone and a wet scrubber, connected in series, installed in 1965, exhausted through Stack S-1, capacity of 250 tons of asphalt per hour.
- (b) One (1) No. 4 distillate oil-fired dryer/burner, known as EU B-2, installed in 1965 and replaced in kind in 1999 due to age, exhausted through Stack S-1, rated at 75.0 million British thermal units per hour.
- (c) One (1) No. 2 distillate hot oil heater, installed in 1999 rated at 2.0 million British thermal units per hour.
- (d) One (1) storage tank, known as V-4, installed in the 1970's in Coral 2, capacity: 20,000 gallons of liquid asphalt.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 SO₂ [326 IAC 2-8-4]

The total input of No. 4 distillate fuel oil to the aggregate dryer/burner shall be limited to 2,678,873 gallons per twelve (12) consecutive month period, rolled monthly. This fuel limit is equivalent to less than 95.1 tons per year of SO₂. Compliance with this limit will assure that the SO₂ emissions from the entire source shall remain less than one hundred (100) tons per year.

D.1.2 Sulfur Dioxide [326 IAC 7-1.1]

Sulfur dioxide emissions from the dryer/burner shall be limited to 0.5 pounds per million British thermal units heat input, equivalent to a sulfur content of the No. 4 distillate oil of 0.5 percent by weight.

D.1.3 PM₁₀ [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4, PM₁₀ emissions from the batch mixer and dryer/burner exhausting through Stack S-1 shall not exceed 22.1 pounds per hour (96.8 tons per year). Compliance with this limit will satisfy 326 IAC 2-8-4. Therefore, the Part 70 rules (326 IAC 2-7) do not apply.

D.1.4 Particulate Matter (PM) [326 IAC 2-2]

- (a) Pursuant to 326 IAC 2-2, PM emissions from the batch mixer and dryer/burner exhausting through Stack S-1 shall not exceed 52.1 pounds per hour. Compliance with this limit will avoid the applicability of 326 IAC 2-2 and satisfy the requirements of 326 IAC 6-3-2.
- (b) The requirement from OP 99-07-90-03229 issued October 26, 1986, Condition 8, requiring that the PM baseline PSD emissions shall be 0.12 grains per dry standard cubic foot at 45,000 dry standard cubic foot per minute, 45 pounds per hour and 4 tons per year are not applicable since no rationale has been identified to retain the PM emission limits for this stationary source in an attainment area for PM₁₀. Since the TSD for this permit could not be located, and this plant was originally portable, the emission limit may have been necessary since the portable plant may have been associated with a co-located source.

D.1.5 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the batch mixer and dryer/burner shall not exceed 61.0 pounds per hour when operating at a process weight rate of 250 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

D.1.6 Volatile Organic Compounds (VOC) [326 IAC 8-5-2]

(a) Pursuant to 326 IAC 8-5-2 (Miscellaneous Operations: asphalt paving), the owner or operator shall: not cause or allow the use of asphalt emulsion containing more than seven (7.0) percent oil distillate by volume of emulsion for any paving application except the following purposes:

- (1) penetrating prime coating
- (2) stockpile storage
- (3) application during the months of November, December, January, February and March

(b) No cutback asphalt or emulsified asphalt shall be used at this plant without prior approval from OAM.

(c) The requirement from OP 99-07-90-03229 issued October 26, 1986, Condition 6, requiring that the rate of emulsified asphalt added to the pugmill shall not exceed 7.1 pounds per second per ton of batch size is not applicable because emulsified asphalt is no longer used at this plant.

D.1.7 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this batch mixer and any control devices.

Compliance Determination Requirements

D.1.8 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

During the period between 30 and 36 months after issuance of this permit, the Permittee shall perform PM and PM₁₀ testing of the batch mixer and dryer/burner exhausting through Stack S-1 utilizing Methods 5 or 17 (40 CFR 60, Appendix A) for PM and Methods 201 or 201A and 202 (40 CFR 51, Appendix M) for PM₁₀, or other methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM₁₀ includes filterable and condensable PM₁₀. Testing shall be conducted in accordance with Section C- Performance Testing.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.1.9 Particulate Matter (PM)

The scrubber and cyclone connected in series for PM control shall be in operation and control emissions from batch mixer and dryer/burner (EU B-1 and EU B-2) at all times that batch mixer and dryer/burner are in operation.

D.1.10 Visible Emissions Notations

- (a) Daily visible emission notations of the batch mixer and dry/burner stack exhaust S-11 shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.1.11 Parametric Monitoring

- (a) The Permittee shall record the total static pressure drop across the scrubber used in conjunction with the batch mixer, at least once per shift when the asphalt production process is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the scrubber shall be maintained within the range of 2.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.

- (b) The Permittee shall record the flow rate through the scrubber used in conjunction with the batch mixer, at least once per shift when the asphalt production process is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the water flow across the scrubber shall be maintained within the range of 350 to 450 gallons of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the flow rate reading is outside of the above mentioned range for any one reading.

The instrument used for determining the flow rate shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.

D.1.12 Cyclone Inspections

An inspection shall be performed each calendar quarter of all cyclones controlling the asphalt production operation when venting to the atmosphere. A cyclone inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors.

D.1.13 Cyclone Failure Detection

In the event that cyclone failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.1.14 Record Keeping Requirements

- (a) To document compliance with Condition D.1.10, the Permittee shall maintain records of visible emission notations of the baghouse stack exhaust once per shift.
- (b) To document compliance with Condition D.1.11, the Permittee shall maintain the following:
 - (1) Daily records of the total static pressure drop and the flow rate through the scrubber during normal operation when venting to the atmosphere.
 - (2) Documentation of all response steps implemented, per event.
 - (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
 - (4) Quality Assurance/Quality Control (QA/QC) procedures.
 - (5) Operator standard operating procedures (SOP).
 - (6) Manufacturer's specifications or its equivalent.
 - (7) Equipment "troubleshooting" contingency plan.
 - (8) Documentation of the dates vents are redirected.
- (c) To document compliance with Conditions D.1.1 and D.1.2, the Permittee shall maintain records in accordance with (1) through (6) below.
 - (1) Calendar dates covered in the compliance determination period;
 - (2) Actual No. 4 fuel oil usage since last compliance determination period and equivalent SO_x emissions;
 - (3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period; and

If the fuel supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:

- (4) Fuel supplier certifications;
 - (5) The name of the fuel supplier; and
 - (6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.15 Reporting Requirements

Quarterly summary to document compliance with operation condition number D.1.1 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter or six (6) month period being reported. These reports shall include the amounts of each fuel used each month. All records and reports shall use calendar months. Records of sulfur content and higher heating value shall be determined by information as obtained by the vendor.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]: Insignificant Activities

- (g) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (h) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.2.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the brazing equipment, cutting torches, soldering equipment and welding equipment shall not exceed the allowable PM emission rate based on the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

D.2.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), the owner or operator shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.2.3 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]

- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaner degreaser facility shall ensure that the following control equipment requirements are met:
 - (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:

- (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
 - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
 - (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
 - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
 - (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9EC) (one hundred twenty degrees Fahrenheit (120EF)):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility shall ensure that the following operating requirements are met:
- (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
CERTIFICATION**

Source Name: Wallace Construction, Inc. d/b/a WAP Company
Source Address: 9790 Old State Road 37 North, Martinsville, Indiana 46151
Mailing Address: 9790 Old State Road 37 North, Martinsville, Indiana 46151
FESOP No.: F 109-11546-03229

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

- 9 Annual Compliance Certification Letter
- 9 Test Result (specify) _____
- 9 Report (specify) _____
- 9 Notification (specify) _____
- 9 Affidavit (specify) _____
- 9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY/DEVIATION OCCURRENCE REPORT**

Source Name: Wallace Construction, Inc. d/b/a WAP Company
Source Address: 9790 Old State Road 37 North, Martinsville, Indiana 46151
Mailing Address: 9790 Old State Road 37 North, Martinsville, Indiana 46151
FESOP No.: F 109-11546-03229

This form consists of 2 pages

Page 1 of 2

Check either No. 1 or No.2	
9	1. This is an emergency as defined in 326 IAC 2-7-1(12) CThe Permittee must notify the Office of Air Management (OAM), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and CThe Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16
9	2. This is a deviation, reportable per 326 IAC 2-8-4(3)(C) CThe Permittee must submit notice in writing within ten (10) calendar days

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency/Deviation:
Describe the cause of the Emergency/Deviation:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency/Deviation started:
Date/Time Emergency/Deviation was corrected:
Was the facility being properly operated at the time of the emergency/deviation? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency/deviation:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

A certification is not required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION**

FESOP Quarterly Report

Source Name: Wallace Construction, Inc. d/b/a WAP Company
Source Address: 9790 Old State Road 37 North, Martinsville, Indiana 46151
Mailing Address: 9790 Old State Road 37 North, Martinsville, Indiana 46151
FESOP No.: F 109-11546-03229
Facility: Aggregate dryer/burner, EU B-2
Parameter: No. 4 distillate fuel oil consumption
Limit: 2,678,873 gallons per twelve (12) consecutive month period, rolled monthly
Equivalent to 95.1 tons of SO₂ per twelve (12) consecutive month period

YEAR: _____

Month	No. 4 Fuel Oil Usage	No. 4 Fuel Oil Usage	No. 4 Fuel Oil Usage
	This Month	Previous 11 Months	12 Month Total

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY COMPLIANCE MONITORING REPORT**

Source Name: Wallace Construction, Inc. d/b/a WAP Company
Source Address: 9790 Old State Road 37 North, Martinsville, Indiana 46151
Mailing Address: 9790 Old State Road 37 North, Martinsville, Indiana 46151
FESOP No.: F 109-11546-03229

Months: _____ **to** _____ **Year:** _____

This report is an affirmation that the source has met all the compliance monitoring requirements stated in this permit. This report shall be submitted quarterly based on a calendar year. Any deviation from the compliance monitoring requirements and the date(s) of each deviation must be reported. Additional pages may be attached if necessary. This form can be supplemented by attaching the Emergency/Deviation Occurrence Report. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD.

Compliance Monitoring Requirement (eg. Permit Condition D.1.3)	Number of Deviations	Date of each Deviation

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management Office of Air Management

Addendum to the Technical Support Document for Federally Enforceable State Operating Permit (FESOP)

Source Name:	Wallace Construction, Inc. d/b/a WAP Company
Source Location:	9790 Old State Road 37 North, Martinsville, Indiana 46151
County:	Morgan
FESOP:	F 109-11546-03229
SIC Code:	2951
Permit Reviewer:	Frank P. Castelli

On June 14, 2000, the Office of Air Management (OAM) had a notice published in the Martinsville Daily Reporter and The Times, Mooresville, Indiana, stating that Wallace Construction, Inc. d/b/a WAP Company had applied for a Federally Enforceable State Operating Permit (FESOP) to operate a stationary hot mix batch asphalt production source. The notice also stated that OAM proposed to issue a FESOP for this operation and provided information on how the public could review the proposed FESOP and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this FESOP should be issued as proposed.

Upon further review, the OAM has decided to make the following changes to the FESOP: The permit language is changed to read as follows (deleted language appears as ~~strikeouts~~, new language is **bolded**):

1. The phone number has been corrected in Condition A.1 as follows:

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary hot mix batch asphalt production source.

Authorized individual:	Richard Wallace
Source Address:	9790 Old State 37 North, Martinsville, Indiana 46151
Mailing Address:	9790 Old State 37 North, Martinsville, Indiana 46151
Phone Number:	317-422- 5356 5366
SIC Code:	2951
County Location:	Morgan
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP)
	Minor Source, under PSD Rules;
	Minor Source, Section 112 of the Clean Air Act

Indiana Department of Environmental Management
Office of Air Management

Technical Support Document (TSD)
for a Federally Enforceable Operating Permit (FESOP)

Source Background and Description

Source Name:	Wallace Construction, Inc. d/b/a WAP Company
Source Location:	9790 Old State Road 37 North, Martinsville, Indiana 46151
County:	Morgan
SIC Code:	2951
Operation Permit No.:	F 109-11546-03229
Permit Reviewer:	Frank P. Castelli

The Office of Air Management (OAM) has reviewed a FESOP application from Wallace Construction, Inc. d/b/a WAP Company relating to the operation of a stationary hot mix batch asphalt production source.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (a) One (1) batch mixer, known as EU B-1, installed in 1965, equipped with a cyclone and a wet scrubber, connected in series, installed in 1965, exhausted through Stack S-1, capacity of 250 tons of asphalt per hour.
- (b) One (1) No. 4 distillate oil-fired dryer/burner, known as EU B-2, installed in 1965 and replaced in kind in 1999 due to age, exhausted through Stack S-1, rated at 75.0 million British thermal units per hour.
- (c) One (1) No. 2 distillate hot oil heater, installed in 1999 rated at 2.0 million British thermal units per hour.
- (d) One (1) storage tank, known as V-4, installed in the 1970's in Coral 2, capacity: 20,000 gallons of liquid asphalt.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

New Emission Units and Pollution Control Equipment Receiving Prior Approval

There are no new facilities proposed at this source during this review process.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Propane for liquefied petroleum gas, or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) British thermal units per hour.
- (b) Fuel oil-fired combustion sources with heat input equal to or less than two million (2,000,000) British thermal units per hour and firing fuel containing less than five-tenths (0.5) percent sulfur by weight.
- (c) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons: one (1) storage tank, known as V-3, installed 1998 in Coral 1, capacity: 500 gallons of gasoline and two (2) storage tanks, known as V-5 and V-6, installed in 1970's in Coral 2, capacity: 7,000 gallons of diesel oil and 6,000 gallons of No. 4 refined fuel oil, respectively.
- (d) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month: two (2) storage tanks, known as V-1 and V-2, installed 1998 in Coral 1, capacity: 2,000 gallons of diesel oil and 1,000 gallons of diesel oil, respectively.
- (e) The following VOC and HAP storage containers: vessels storing lubricating oil, hydraulic oils, machining oils, and machining fluids.
- (f) Application of oils, greases lubricants or other nonvolatile materials applied as temporary protective coatings.
- (g) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (h) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (i) Paved roads and parking lots with public access.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

- (a) OP 99-07-86-3229, issued on August 10, 1982 to Waverly Asphalt & Paving Company; and
- (b) OP 99-07-90-3229, issued on October 21, 1986 to WAP Company.
- (c) CP 109-7836-03229 withdrawn on February 20, 1998. by WAP Company.
- (d) A 109-9241-03229 change of name on permits in (a) and (b) from WAP Company to Wallace Construction, Inc.

All conditions from previous approvals were incorporated into this FESOP except the following:

OP 99-07-90-03229, issued on October 21, 1986

- (a) Conditions 4 and 5: A valid permit consists of this approval and a site approval letter. The plant has been approved for operation in attainment and unclassified areas only based on the requirements specified in 325 IAC 2-2. However, a thirty (30) day advanced notice to relocated is required.

Reason not incorporated: The source is now being permitted as a stationary plant rather than a portable plant.

- (b) Condition 6: The rate of addition of emulsified asphalt to the pugmill shall not exceed 7.1 pounds per second per ton of batch size.

Reason not incorporated: The source is no longer using emulsified asphalt.

- (c) Condition 7: Plant roads leading into and around the plant will be watered or oiled as needed or paved to prevent fugitive dust.

Reason not incorporated: The source has paved all roads and therefore the fugitive dust plan submitted on November 15, 1999 will be incorporated into the permit.

- (d) Condition 8: PM baseline PSD emissions shall be 0.12 grains per dry standard cubic foot at 45,000 dry standard cubic foot per minute, 45 pounds per hour and 4 tons per year.

Reason not incorporated: No rationale has been identified to retain the PM emission limits for this stationary source in an attainment area for PM₁₀. Since the TSD for this permit could not be located, and this plant was originally portable, the emission limit may have been necessary since the portable plant may have been associated with a co-located source.

In order to assure that this stationary source does not exceed the major source level of 250 tons per year, including fugitive emissions, since there was an applicable NSPS for this source type, the hourly PM emission rate from the batch mixer known as EU B-1 will be limited to 52.1 pounds per hour, equivalent to 228 tons per year.

The amount of PM₁₀, from batch mixer, known as EU B-1, shall be limited to less than 22.1 pounds per hour, equivalent to less than 96.8 tons per year to comply with the requirements of 326 IAC 2-8.

Enforcement Issue

- (a) IDEM is aware that the source was not issued a FESOP by December 14, 1996 nor did they submit a Part 70 application by that date.
- (b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

Recommendation

The staff recommends to the Commissioner that the FESOP be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete FESOP application for the purposes of this review was received on November 15, 1999. Additional information was received on March 6, 2000 and verbally on May 8 and 31, 2000.

There was no notice of completeness letter was mailed to the source.

Emission Calculations

See pages 1 through 12 of 12 of Appendix A of this document for detailed emissions calculations.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	35,082
PM ₁₀	4,940
SO ₂	171
VOC	3.82
CO	13.0
NO _x	50.2

Note: For the purpose of determining Title V applicability for particulates, PM₁₀, not PM, is the regulated pollutant in consideration.

HAPs	Potential To Emit (tons/year)
Lead	0.008
All Other HAPs	6.35
TOTAL	Single less than 10 and Combination less than 25

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM₁₀ and SO₂ are equal to or greater than one hundred (100) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

(b) Fugitive Emissions

Although this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, there was an applicable New Source Performance Standards that was in effect on August 7, 1980, therefore the fugitive emissions are counted toward determination of PSD and Emission Offset applicability.

- (c) This source, otherwise required to obtain a Title V permit, has agreed to accept a permit with federally enforceable limits that restrict its PTE to below the Title V emission levels. Therefore, this source will be issued a Federally Enforceable State Operating Permit (FESOP), pursuant to 326 IAC 2-8.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 1995 OAM emission data.

Pollutant	Actual Emissions (tons/year)
PM	720
PM ₁₀	-
SO ₂	1.17
VOC	0.448
CO	0.608
NO _x	0.576
HAP	-

No previous HAPs emission data have been received from the source.

Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Federally Enforceable State Operating Permit.

	Limited Potential to Emit (tons/year)						
Process/facility	PM	PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs
Asphalt Production	101 (<249)	13.5 (<99)	99.5	0.480	7.01	28.0	3.63
Insignificant Activities	1.00	1.00	0.400	3.00	1.00	2.00	1.00
Total Emissions	102 (<250)	14.5 (<100)	<100	3.48	8.01	30.0	4.63

Note: The values in parentheses for PM are the allowable emissions pursuant to 326 IAC 2-2. The values in parentheses for PM₁₀ reflect the maximum emission rate that will allow compliance pursuant to 326 IAC 2-8.

The applicant has accepted a No. 4 fuel oil limit to the dryer/burner, EU B-2, of less than 2,678,873 gallons per twelve (12) consecutive month period, rolled monthly which is equivalent to a SO₂ limit of less than 95.1 tons per year (see page 12 of 12 in Appendix A). This fuel limit was based on the unlimited potential to emit SO₂ from the hot oil heater of 4.44 tons per year and an estimate of 0.4 tons of SO₂ per year from insignificant activities for a total of 4.84 (4.44 + 0.4) tons per year. Therefore, the fuel oil limit on the dryer/burner will assure that the total SO₂ emissions from the entire source will not exceed one hundred (100) tons per year.

County Attainment Status

The source is located in Morgan County.

Pollutant	Status
PM ₁₀	Attainment
SO ₂	Attainment
NO ₂	Attainment
Ozone	Attainment
CO	Attainment
Lead	Attainment

Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Morgan County has been designated as attainment or unclassified for ozone.

Federal Rule Applicability

- (a) This source is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.90, Subpart I, because the asphalt plant was constructed prior to the June 11, 1973 applicability date. All replacements have been in kind.
- (b) The 20,000 gallon liquid asphalt cement storage tank, known as V-4, installed in the 1970's is not subject to the New Source Performance Standard, 326 IAC 12, 40 CFR 60.110 or 110a, Subpart K or Ka, because although it may have been constructed after June 11, 1973 or after May 19, 1978 the capacity of the storage tank is less than the 40,000 gallon applicability level for both Subparts K and Ka. This storage tank is also not subject to 40 CFR 60.110b, Subpart Kb, because it was constructed prior to the July 23, 1984 applicability date of this Subpart.
- (c) The degreaser is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP), 326 IAC 14, (40 CFR 63.460, Subpart T) since halogenated solvents are not used in the insignificant degreasing operation..

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

In order to assure that this source does not exceed the major source level of 250 tons per year, including fugitive emissions, the hourly PM emission rate from the batch mixer known as EU B-1 will be limited to 52.1 pounds per hour, equivalent to 228 tons per year (250 minus the screening, conveying, oil heater, storage and insignificant potential PM after controls and limits (21.9 tons per year)). This hourly PM emission rate will also satisfy the requirements of 326 IAC 6-3-2.

326 IAC 2-6 (Emission Reporting)

This source is located in Morgan County and is not subject to 326 IAC 2-6 (Emission Reporting), because it will not emit more than one hundred (100) tons per year of PM₁₀, NO_x, or SO₂, including fugitive emissions.

326 IAC 2-8-4 (FESOP)

Pursuant to 326 IAC 2-8-4:

- (a) The amount of PM₁₀, from batch mixer, known as EU B-1, shall be limited to less than 22.1 pounds per hour, equivalent to less than 96.8 tons per year (99.0 minus the screening, conveying, oil heater and storage potential PM₁₀ after controls and limits (2.2 tons per year)).
- (b) The applicant has accepted a No. 4 fuel oil limit to the dryer/burner of less than 2,678,873 gallons per twelve (12) consecutive month period, rolled monthly, which is equivalent to a SO₂ limit of less than 95.1 tons per year (see page 12 of 12 in Appendix A). This fuel limit was based on the unlimited potential to emit SO₂ from the hot oil heater of 4.44 tons per year and an estimate of 0.4 tons of SO₂ per year from insignificant activities for a total of 4.84 (4.44 + 0.4) tons per year. Therefore, the fuel oil limit on the dryer/burner will assure that the total SO₂ emissions from the entire source will not exceed one hundred (100) tons per year.

Therefore, the requirements of 326 IAC 2-7, do not apply.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 7-1.1-2 (Sulfur dioxide emission limitations)

- (a) The hot oil heater is not subject to the requirements of this rule since the potential sulfur dioxide emissions are less than ten (10) pounds per hour and twenty-five (25) tons per year.
- (b) Sulfur dioxide (SO₂) emissions from the 75.0 million British thermal units per hour dryer/ burner shall be limited to 0.5 pounds per million British thermal units heat input for distillate oil consumption.

Sulfur dioxide emissions from page 2 of 12 of Appendix A are 38.0 pounds per hour for dryer/ mixer on No. 4 fuel oil. Therefore 38.0 pounds of SO₂ per hour divided by 75.0 million British thermal units per hour equals 0.5 pounds of SO₂ per million British thermal units. Therefore, the dryer/burner on No.4 fuel oil complies with this rule.

326 IAC 8-4-3 (Petroleum liquid storage facilities)

The liquid asphalt and the fuel oil storage tanks are not subject to the requirement of this rule because their capacities are less than the applicability threshold of 39,000 gallons.

State Rule Applicability - Individual Facilities

326 IAC 6-3-2 (Process Operations)

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from batch mixer shall not exceed 61.0 pounds per hour when operating at a process weight rate of 250 tons per hour.

The cyclone and scrubber shall be in operation at all times the batch mixer is in operation, in order to comply with this limit. The potential PM emissions after control from the batch mixer are 32.0 pounds per hour (140.16 tons per year) which is less than the allowable PM emission rate of 61.0 pounds per hour. Therefore, operation is in compliance with this rule.

326 IAC 6-4 (Fugitive Dust Emissions Limitations)

This rule requires that the source not generate fugitive dust to the extent that some portion of the material escapes beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located.

326 IAC 6-5 (Fugitive Particulate Emissions Limitations)

This rule requires a fugitive dust plan to be submitted. The plan was submitted on November 15, 1999 was reviewed, and approved and consists of:

- (a) Applying water to stockpiles, feed and intermediate points and at loading and unloading points on an as-needed basis,
- (b) Minimizing the distance between transfer points and minimizing the fall distances and discharge rates in loading and unloading of aggregate,
- (c) Maintaining a minimum size and number of stock piles, and
- (d) Tarping of material during transportation.

326 IAC 8-5-2 (Miscellaneous Operations: asphalt paving)

No person shall cause or allow the use of asphalt emulsion containing more than seven (7%) percent oil distillate by volume of emulsion for any paving application except the following purposes:

- (a) penetrating prime coating
- (b) stockpile storage
- (c) application during the months of November, December, January, February and March

Emulsified asphalt will not be produced at this source.

Test Requirements

PM and PM₁₀ testing is required for the batch mixer and dry/burner stack exhaust S-1 in order to assure compliance with 326 IAC 2-2, 326 IAC 2-8-4 and 326 IAC 6-3-2 as shown in Appendix A. Stack testing will determine if the actual control efficiencies for both PM and PM₁₀ are adequate to demonstrate compliance with the hourly PM and PM₁₀ emission limits.

Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The batch mixer has applicable compliance monitoring conditions as specified below:

- (a) Daily visible emissions notations of the dryer stack exhaust (S-1) shall be performed once per shift during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

- (b) The Permittee shall record the flow rate and pressure drop across the scrubber controlling the batch mixer, at least once per shift when the batch mixer is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the flow rate of the scrubber shall be maintained at 350 - 450 gallons of water or a flow rate established during the latest stack test and the pressure drop shall be maintained within the range of 2 to 6 inches of water or a range established during the latest stack test. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when the flow rate reading is outside of the above mentioned range for any one reading.

These monitoring conditions are necessary because the scrubber and cyclone to control PM emissions from the aggregate dryer must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) 326 IAC 2-2, 326 IAC 5-1 and 326 IAC 2-8 (FESOP).

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) FESOP Application Form GSD-08.

- (a) This source will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Clean Air Act Amendments.
- (b) See attached calculations for detailed air toxic calculations in Appendix A on page 4 of 12.

Conclusion

The operation of this stationary hot mix batch asphalt production source shall be subject to the conditions of the attached proposed FESOP No.: F 109-11546-03229.

Appendix A: Emission Calculations

Company Name: Wallace Construction, Inc. d/b/a WAP Company
Plant Location: 9790 Old State Road 37 North, Martinsville, Indiana 46151
County: Morgan
FESOP: F 109-11546
Plt. ID: 109-03229
Date: November 15, 1999
Permit Reviewer: Frank P. Castelli

I. Potential Emissions

A. Source emissions before controls

Hot Oil Heater on Oil (oil/<100MMBTU/uncontrolled)

The following calculations determine the amount of emissions created by #2 & #1 distillate fuel oil @ 0.5 % sulfur, based on 8760 hours of use and AP-42, Tables 1.3-1, 1.3-2, 1.3-3

Pollutant:	<u>2.000</u> MMBtu/hr * 8760 hrs/yr	* Ef (lbs/1000 gal) = (tons/yr)
	<u>140000.0</u> Btu/gal * 2000 lbs/ton	
P M:	2.0 lbs/1000 gal =	<u>0.125</u> tons/yr
PM-10:	3.3 lbs/1000 gal =	<u>0.206</u> tons/yr
S O x:	71.0 lbs/1000 gal =	<u>4.443</u> tons/yr
N O x:	20.0 lbs/1000 gal =	<u>1.251</u> tons/yr
V O C:	0.34 lbs/1000 gal =	<u>0.021</u> tons/yr
C O:	5.0 lbs/1000 gal =	<u>0.313</u> tons/yr

Hot Oil Heater on Gas (gas/<100MMBTU/uncontrolled)

The following calculations determine the amount of emissions created by natural gas combustion, based on 8760 hours of use, AP-42 Ch. 1.4, Tables 1.4-1, 1.4-2, 1.4-3

Pollutant:	<u>0.000</u> MMBtu/hr * 8760 hrs/yr	* Ef (lbs/MMcf) = (tons/yr)
	<u>1000</u> Btu/cf * 2000 lbs/ton	
P M:	1.9 lbs/MMcf =	<u>0.000</u> tons/yr
P M-10:	7.6 lbs/MMcf =	<u>0.000</u> tons/yr
S O x:	0.6 lbs/MMcf =	<u>0.000</u> tons/yr
N O x:	100.0 lbs/MMcf =	<u>0.000</u> tons/yr
V O C:	5.5 lbs/MMcf =	<u>0.000</u> tons/yr
C O:	84.0 lbs/MMcf =	<u>0.000</u> tons/yr

Dryer Burner (gas/<100MMBTU/uncontrolled)

The following calculations determine the amount of emissions created by natural gas combustion, based on 8760 hours of use, AP-42 Ch. 1.4, Tables 1.4-1, 1.4-2, 1.4-3

Pollutant:	<u>0.000</u> MMBtu/hr * 8760 hrs/yr	* Ef (lbs/MMcf) = (tons/yr)
	<u>1000</u> Btu/cf * 2000 lbs/ton	
P M:	1.9 lbs/MMcf =	<u>0.0000</u> tons/yr
P M-10:	7.6 lbs/MMcf =	<u>0.000</u> tons/yr
S O x:	0.6 lbs/MMcf =	<u>0.000</u> tons/yr
N O x:	100.0 lbs/MMcf =	<u>0.0000</u> tons/yr
V O C:	5.5 lbs/MMcf =	<u>0.000</u> tons/yr
C O:	84.0 lbs/MMcf =	<u>0.000</u> tons/yr

Dryer Burner (gas/>100MMBTU/uncontrolled)

The following calculations determine the amount of emissions created by natural gas combustion, based on 8760 hours of use, AP-42 Ch. 1.4, Tables 1.4-1, 1.4-2, 1.4-3

Pollutant: 0.000 MMBtu/hr * 8760 hrs/yr * Ef (lbs/MMcf) (tons/yr)
1000 Btu/cf * 2000 lbs/ton

P M:	1.9 lbs/MMcf =	<u>0.000</u> tons/yr
P M-10:	7.6 lbs/MMcf =	<u>0.000</u> tons/yr
S O x:	0.6 lbs/MMcf =	<u>0.000</u> tons/yr
N O x:	280.0 lbs/MMcf =	<u>0.00</u> tons/yr
V O C:	5.5 lbs/MMcf =	<u>0.000</u> tons/yr
C O:	84.0 lbs/MMcf =	<u>0.000</u> tons/yr

Dryer Burner (gas/>100MMBTU/low nox)

The following calculations determine the amount of emissions created by natural gas combustion, based on 8760 hours of use, AP-42 Ch. 1.4, Tables 1.4-1, 1.4-2, 1.4-3 (low NOx burner = 140, flue gas recirculation = 100)

Pollutant: 0.000 MMBtu/hr * 8760 hrs/yr * Ef (lbs/MMcf) (tons/yr)
1000 Btu/cf * 2000 lbs/ton

P M:	1.9 lbs/MMcf =	<u>0.000</u> tons/yr
P M-10:	7.6 lbs/MMcf =	<u>0.000</u> tons/yr
S O x:	0.6 lbs/MMcf =	<u>0.000</u> tons/yr
N O x:	140.0 lbs/MMcf =	<u>0.000</u> tons/yr
V O C:	5.5 lbs/MMcf =	<u>0.000</u> tons/yr
C O:	84.0 lb/MMcf =	<u>0.000</u> tons/yr

(#2 & #1 oil) Dryer Burner <100

The following calculations determine the amount of emissions created by #2 & #1 distillate fuel oil @ 0.5 % sulfur, based on 8760 hours of use and AP-42, Tables 1.3-1, 1.3-2, 1.3-3

Pollutant: 0.0 MMBtu/hr * 8760 hrs/yr * Ef (lbs/1000 gal) = (tons/yr)
139000.0 Btu/gal * 2000 lbs/ton

If Rating >100 mmBtu N O x: 24.0 V O C: 0.20	P M:	2.0 lbs/1000 gal =	<u>0.000</u> tons/yr
	PM-10:	3.3 lbs/1000 gal =	<u>0.000</u> tons/yr
	S O x:	71.0 lbs/1000 gal =	<u>0.000</u> tons/yr
	N O x:	20.0 lbs/1000 gal =	<u>0.000</u> tons/yr
	V O C:	0.34 lbs/1000 gal =	<u>0.000</u> tons/yr
	C O:	5.0 lbs/1000 gal =	<u>0.000</u> tons/yr

(#4 oil/ <100MMBTU) Dryer Burner

The following calculations determine the amount of emissions created by #4 distillate fuel oil @ 0.5 % sulfur, based on 8760 hours of use and AP-42, Tables 1.3-1, 1.3-2, 1.3-3

Pollutant: 75.000 MMBtu/hr * 8760 hrs/yr * Ef (lbs/1000 gal) = (tons/yr)
140000.0 Btu/gal * 2000 lbs/ton

P M:	2.0 lbs/1000 gal =	<u>4.693</u> tons/yr
PM-10:	3.3 lbs/1000 gal =	<u>7.743</u> tons/yr
S O x:	71.0 lbs/1000 gal =	<u>166.596</u> tons/yr
N O x:	20.0 lbs/1000 gal =	<u>46.929</u> tons/yr
V O C:	0.34 lbs/1000 gal =	<u>0.798</u> tons/yr
C O:	5.0 lbs/1000 gal =	<u>11.732</u> tons/yr

(#4 oil/ >100MMBTU)**Dryer Burner**

The following calculations determine the amount of emissions created by #4 distillate
 fuel oil @ 0.000 % sulfur, based on 8760 hours of use and AP-42, Tables 1.3-1, 1.3-2, 1.3-3

Pollutant:	<u>0.0</u> MMBtu/hr * 8760 hrs/yr	* Ef (lbs/1000 gal) = (tons/yr)
	<u>0.0</u> Btu/gal * 2000 lbs/ton	
P M:	2.0 lbs/1000 gal =	<u>0.000</u> tons/yr
PM-10:	3.3 lbs/1000 gal =	<u>0.000</u> tons/yr
S O x:	0.0 lbs/1000 gal =	<u>0.000</u> tons/yr
N O x:	24.0 lbs/1000 gal =	<u>0.000</u> tons/yr
V O C:	0.20 lbs/1000 gal =	<u>0.000</u> tons/yr
C O:	5.0 lbs/1000 gal =	<u>0.000</u> tons/yr

(waste oil/ vaporizing burner)

The following calculations determine the amount of emissions created by waste
 fuel oil @ 0.500 % sulfur, based on 8760 hours of use and AP-42, Chapter 1.11

0.000

% Ash

0.000

% Lead

Pollutant:	<u>0.0</u> MMBtu/hr * 8760 hrs/yr	* Ef (lbs/1000 gal) = (tons/yr)
	<u>0.0</u> Btu/gal * 2000 lbs/ton	
P M:	0.0 lbs/1000 gal =	<u>0.000</u> tons/yr
P M-10:	0.0 lbs/1000 gal =	<u>0.000</u> tons/yr
S O x:	50.0 lbs/1000 gal =	<u>0.000</u> tons/yr
N O x:	11.0 lbs/1000 gal =	<u>0.000</u> tons/yr
VOC	1.0 lbs/1000 gal =	<u>0.000</u> tons/yr
C O:	1.7 lbs/1000 gal =	<u>0.000</u> tons/yr
Pb:	0.0 lbs/1000 gal =	<u>0.000</u> tons/yr

(waste oil/atomizing burner)

The following calculations determine the amount of emissions created by waste
 fuel oil @ 0.000 % sulfur, based on 8760 hours of use and AP-42 Chapter 1.11

0.000

% Ash

0.000

% Lead

Pollutant:	<u>0.000</u> MMBtu/hr * 8760 hrs/yr	* Ef (lbs/1000 gal) = (tons/yr)
	<u>0.000</u> Btu/gal * 2000 lbs/ton	
P M:	0.0 lbs/1000 gal =	<u>0.000</u> tons/yr
P M-10:	0.0 lbs/1000 gal =	<u>0.000</u> tons/yr
S O x:	0.0 lbs/1000 gal =	<u>0.000</u> tons/yr
N O x:	16.0 lbs/1000 gal =	<u>0.000</u> tons/yr
VOC	1.0 lbs/1000 gal =	<u>0.000</u> tons/yr
C O:	2.10 lbs/1000 gal =	<u>0.000</u> tons/yr
Pb:	0.00 lbs/1000 gal =	<u>0.000</u> tons/yr

**** aggregate drying: drum-mix plant ****

The following calculations determine the amount of emissions created by aggregate drying, based on 8760 hours of use and EPA SCC #3-05-002-05:

P M:	19 lbs/ton x	<u>0.0</u>	tons/hr x	8760 hrs/yr =	<u>0.000</u> tons/yr
		2000	lbs/ton		
P M-10:	4.4 lbs/ton x	<u>0</u>	tons/hr x	8760 hrs/yr =	<u>0.000</u> tons/yr
		2000	lbs/ton		
Lead:	3.30000000E-06 lbs/ton x	<u>0</u>	tons/hr x	8760 hrs/yr =	<u>0.000</u> tons/yr
		2000	lbs/ton		
HAPs:	0.0058 lbs/ton x	<u>0</u>	tons/hr x	8760 hrs/yr =	<u>0.000</u> tons/yr
		2000	lbs/ton		

HAPs include benzene, ethylbenzene, formaldehyde, methyl chloroform, naphthalene, toluene, xylene; arsenic, cadmium, chromium, manganese, mercury, and nickel compounds.

**** aggregate drying: batch-mix plant ****

The following calculations determine the amount of emissions created by aggregate drying, based on 8760 hours of use and EPA SCC #3-05-002-05:

P M:	32 lbs/ton x	<u>250.0</u>	tons/hr x	8760 hrs/yr =	<u>35040.0</u> tons/yr
		2000	lbs/ton		
P M-10:	4.5 lbs/ton x	<u>250</u>	tons/hr x	8760 hrs/yr =	<u>4927.5</u> tons/yr
		2000	lbs/ton		
Lead:	3.30000000E-06 lbs/ton x	<u>250</u>	tons/hr x	8760 hrs/yr =	<u>0.004</u> tons/yr
		2000	lbs/ton		
HAPs:	0.0058 lbs/ton x	<u>250</u>	tons/hr x	8760 hrs/yr =	<u>6.351</u> tons/yr
		2000	lbs/ton		

HAPs include benzene, ethylbenzene, formaldehyde, methyl chloroform, naphthalene, toluene, xylene; arsenic, cadmium, chromium, manganese, mercury, and nickel compounds.

**** conveying / handling ****

The following calculations determine the amount of emissions created by material handling of aggregate, based on 8760 hours of use and AP-42, Ch 11.19.2

$$E_f = .0032^* \frac{(U/5)^{1.3}}{(M/2)^{1.4}} \cdot k = \underline{\underline{0.003}} \text{ lbs/ton}$$

where k= 1 (particle size multiplier)
U = 12 mph mean wind speed (worst case)
M = 5.0 % moisture

P M :	<u>0.003</u> lbs/ton x	<u>238</u> tons/hr x	8760 hrs/yr =	<u>2.880</u> tons/yr	
		2000 lbs/ton			
P M-10:	10% of PM =			<u>0.288</u> tons/yr	
Screening	PM: <u>238</u> tons/hr x	0.0315 lbs/ton	/ 2000 lbs/ton x	8760 hrs/yr =	<u>32.837</u> tons/yr
	P M-10: 10% of PM =			<u>3.284</u> tons/yr	AP-42 Ch.11.19.2

The following calculations determine the amount of emissions created by vehicle traffic on unpaved roads, based on 8760 hours of use and AP-42, Ch 11.2.1.

A. Tri-axle Truck

<u>0.0</u> trips/hr x			
<u>0.00</u> miles/roundtrip x			
8760 hrs/yr =		<u>0.0</u> miles per year	
For PM		For PM-10	
Ef =		{k*[(s/12)^0.8]*[(W/3)^b]/[(Mdry/0.2)^c]}*[(365-p)/365]	
11.24		= 2.27 lb/mile	
10		where k = 2.6 (particle size multiplier for PM-10) (k=10 for PM-30 or TSP)	
4.8		s = 4.8 mean % silt content of unpaved roads	
0.5		b = 0.4 Constant for PM-10 (b = 0.5 for PM-30 or TSP)	
0.4		c = 0.3 Constant for PM-10 (c = 0.4 for PM-30 or TSP)	
38		W = 38 tons average vehicle weight	
0.2		Mdry = 0.2 surface material moisture content, % (default is 0.2 for dry conditions)	
125		p = 125 number of days with at least 0.254mm of precipitation (See Figure 13.2.2-1)	
<u>11.24</u> lb/mi x		<u>0</u> mi/yr =	PM <u>0.00</u> tons/yr
		2000 lb/ton	
<u>2.27</u> lb/mi x		<u>0</u> mi/yr =	PM-10 <u>0.00</u> tons/yr
		2000 lb/ton	

B. Front End Loader

<u>0.0</u> trips/hr x			
<u>0.000</u> miles/roundtrip x		<u>0.0</u> miles per year	
8760 hrs/yr =			
For PM	For PM-10		
11.24	Ef = {k*[(s/12)^0.8]*[(W/3)^b]/[(Mdry/0.2)^c]}*[(365-p)/365]		
10	= 2.27 lb/mile		
4.8	where k = 2.6 (particle size multiplier for PM-10) (k=10 for PM-30 or TSP)		
0.5	s = 4.8 mean % silt content of unpaved roads		
0.4	b = 0.4 Constant for PM-10 (b = 0.5 for PM-30 or TSP)		
38	c = 0.3 Constant for PM-10 (c = 0.4 for PM-30 or TSP)		
0.2	W = 38 tons average vehicle weight		
125	Mdry = 0.2 surface material moisture content, % (default is 0.2 for dry conditions)		
	p = 125 number of days with at least 0.254mm of precipitation (See Figure 13.2.2-1)		
<u>11.24 lb/mi x</u>		<u>0 mi/yr =</u>	<u>PM 0.00 tons/yr</u>
2000 lb/ton			
<u>2.27 lb/mi x</u>		<u>0 mi/yr =</u>	<u>PM-10 0.00 tons/yr</u>
2000 lb/ton			

C. Semi Truck

<u>0.0</u> trips/hr x				
<u>0.0</u> miles/roundtrip x				
8760 hrs/yr =		<u>0.0</u> miles per year		
For PM	For PM-10			
11.24	$E_f = \{k * [(s/12)^{0.8}] * [(W/3)^b] / [(M_{dry}/0.2)^c] * [(365-p)/365]\}$			
10	= 2.27 lb/mile			
4.8	where k = 2.6 (particle size multiplier for PM-10) (k=10 for PM-30 or TSP)			
0.5	s = 4.8 mean % silt content of unpaved roads			
0.4	b = 0.4 Constant for PM-10 (b = 0.5 for PM-30 or TSP)			
38	c = 0.3 Constant for PM-10 (c = 0.4 for PM-30 or TSP)			
0.2	W = 38 tons average vehicle weight			
125	M _{dry} = 0.2 surface material moisture content, % (default is 0.2 for dry conditions)			
	p = 125 number of days with at least 0.254mm of precipitation (See Figure 13.2.2-1)			
	11.24 lb/mi x	0 mi/yr =	PM	<u>0.00</u> tons/yr
	2000 lb/ton			
	2.27 lb/mi x	0 mi/yr =	PM-10	<u>0.00</u> tons/yr
	2000 lb/ton			
All Trucking	Total PM: <u>0.00</u> tons/yr			
	Total PM-10: <u>0.00</u> tons/yr			

* * storage * *

The following calculations determine the amount of emissions created by wind erosion of storage stockpiles, based on 8760 hours of use and AP-42, Ch 11.2.3.

$E_f = 1.7 * (s/1.5) * (365-p)/235 * (f/15)$	
= 1.74 lbs/acre/day for sand	
= 1.16 lbs/acre/day for stone	
= 1.16 lbs/acre/day for slag	
= 1.16 lbs/acre/day for gravel	
= 1.16 lbs/acre/day for RAP	
where s = 1.5 % silt for sand	
s = 1.0 % silt of stone	
s = 1.0 % silt of slag	
s = 1.0 % silt of gravel	
s = 1.0 % silt for RAP	
p = 125 days of rain greater than or equal to 0.01 inches	
f = 15 % of wind greater than or equal to 12 mph	
$E_p(\text{storage}) = E_f * sc * (20 \text{ cuft/ton}) * (365 \text{ days/yr})$	
$(2000 \text{ lbs/ton}) * (43560 \text{ sqft/acre}) * (25 \text{ ft})$	
= 0.023 tons/yr for sand	
= 0.000 tons/yr for stone	
= 0.000 tons/yr for slag	
= 0.000 tons/yr for gravel	
= 0.000 tons/yr for RAP	
Total PM: <u>0.023</u> tons/yr	
where sc = <u>3.9</u> ,000 tons storage capacity for sand	
sc = <u>0.0</u> ,000 tons storage capacity for stone	
sc = <u>0</u> ,000 tons storage capacity for slag	
sc = <u>0</u> ,000 tons storage capacity for gravel	
sc = <u>0</u> ,000 tons storage capacity for RAP	

P M-10:	35% of PM =	0.008 tons/yr for sand
	35% of PM =	0.000 tons/yr for stone
	35% of PM =	0.000 tons/yr for slag
	35% of PM =	0.000 tons/yr for gravel
	35% of PM =	0.000 tons/yr for RAP
Total PM-10:		0.008 tons/yr

Emissions before controls (combustion plus production) are as follows:

natural gas		#2 oil		#4 oil	Plus Hot Oil Heater on #2	waste oil	
P M:	0 tons/yr	P M:	35075.9 tons/yr	P M:	35080.558 tons/yr	P M:	0.000 tons/yr
P M-10:	0 tons/yr	P M-10:	4931.3 tons/yr	P M-10:	4939.029 tons/yr	P M-10:	0.000 tons/yr
S O x:	0.000 tons/yr	S O x:	4.4 tons/yr	S O x:	171.039 tons/yr	S O x:	0.000 tons/yr
N O x:	0.0 tons/yr	N O x:	1.3 tons/yr	N O x:	48.180 tons/yr	N O x:	0.000 tons/yr
V O C:	0.000 tons/yr	V O C:	0.021 tons/yr	V O C:	0.819 tons/yr	V O C:	0.000 tons/yr
C O:	0.0 tons/yr	C O:	0.3 tons/yr	C O:	12.045 tons/yr	C O:	0.000 tons/yr
Lead:	0.004 tons/yr	Lead:	0.004 tons/yr	Lead:	0.004 tons/yr	Lead:	0.004 tons/yr
HAPs:	0.00 tons/yr	HAPs:	6.35 tons/yr	HAPs:	6.351 tons/yr	HAPs:	0.000 tons/yr

B. Source emissions after controls

dryer combustion: gas

P M:	0.00 tons/yr x	0.00000 emitted after controls =	0.000 tons/yr
P M-10:	0.00 tons/yr x	0.00000 emitted after controls =	0.000 tons/yr

dryer combustion: #2 oil

P M:	0.00 tons/yr x	1.00000 emitted after controls =	0.000 tons/yr
P M-10:	0.00 tons/yr x	1.00000 emitted after controls =	0.000 tons/yr

hot oil heater combustion: gas

P M:	0.000 tons/yr x	1.00000 emitted after controls =	0.000 tons/yr
P M-10:	0.000 tons/yr x	1.00000 emitted after controls =	0.000 tons/yr

hot oil heater combustion: #2 oil

P M:	0.125 tons/yr x	1.00000 emitted after controls =	0.125 tons/yr
P M-10:	0.206 tons/yr x	1.00000 emitted after controls =	0.206 tons/yr

dryer combustion: #4 oil

P M:	4.69 tons/yr x	0.00400 emitted after controls =	0.019 tons/yr
P M-10:	7.74 tons/yr x	0.00400 emitted after controls =	0.031 tons/yr

dryer combustion: waste oil

P M:	0.00 tons/yr x	0.000 emitted after controls =	0.000 tons/yr
P M-10:	0.00 tons/yr x	0.000 emitted after controls =	0.000 tons/yr

aggregate drying:

P M:	35040.00 tons/yr x	0.00400 emitted after controls =	140.160 tons/yr
P M-10:	4927.50 tons/yr x	0.00400 emitted after controls =	19.710 tons/yr

conveying/handling:

P M:	2.88 tons/yr x	1.000 emitted after controls =	2.880 tons/yr
P M-10:	0.29 tons/yr x	1.000 emitted after controls =	0.288 tons/yr

screening

P M:	32.84 tons/yr x	<u>1.000</u> emitted after controls =	<u>32.837</u> tons/yr
P M-10:	3.28 tons/yr x	<u>1.000</u> emitted after controls =	<u>3.284</u> tons/yr

unpaved roads:

P M:	0.00 tons/yr x	50.00% emitted after controls =	<u>0.000</u> tons/yr
P M-10:	0.00 tons/yr x	50.00% emitted after controls =	<u>0.000</u> tons/yr

storage:

P M:	0.023 tons/yr x	50.00% emitted after controls =	<u>0.011</u> tons/yr
P M-10:	0.008 tons/yr x	50.00% emitted after controls =	<u>0.004</u> tons/yr

Emissions after controls (combustion plus production) are as follows:

	Gas	#2 Oil	#4 Oil	Waste Oil	
P M:	<u>0.0</u>	<u>0.0</u>	<u>175.907</u>	<u>0.000</u>	tons/yr
P M-10:	<u>0.0</u>	<u>0.0</u>	<u>23.317</u>	<u>0.000</u>	tons/yr

II. Allowable Emissions

A. The following calculations determine compliance with NSPS Subpart I, which limits stack emissions from asphalt plants to 0.04 gr/dscf:

Not Applicable, Plant Pre-Dates NSPS

$$\begin{aligned}
 & \frac{0.04 \text{ grains}^*}{\text{dscf}} \times \frac{0.000 \text{ acfm}^*}{460} \times \frac{528}{+} \times \frac{1}{270} \times \frac{100}{100} \times \frac{5 \text{ \% moisture}^*}{100} \\
 & \frac{525600 \text{ minutes}^*}{\text{year}} \times \frac{1}{7000 \text{ grains}} \times \frac{1 \text{ ton}}{2000 \text{ lbs}} = \underline{0.000} \text{ tons/yr}
 \end{aligned}$$

To meet NSPS Subpart I, the following value must be < amount calculated above

140.3 tons/yr

B. The following calculations determine the maximum sulfur content of distillate #2 fuel oil allowable by 326 IAC 7:

$$\begin{aligned}
 & \text{limit: } 0.5 \text{ lbs/MMBtu} \\
 & 0.5 \text{ lbs/MMBtu} \times \frac{140000.0 \text{ Btu/gal}}{70 \text{ lbs/1000gal}} = \frac{70.0 \text{ lbs/1000gal}}{142.0 \text{ lb/1000 gal}} = \underline{0.493} \\
 & \text{Sulfur content must be less than or equal to } \underline{0.493} \% \text{ to comply with 326 IAC 7} \\
 & \text{and to limit SO}_2 \text{ emissions to 100 tons per year or less.}
 \end{aligned}$$

C. The following calculations determine the maximum sulfur content of residual waste fuel oil allowable by 326-IAC 7:

$$\begin{aligned}
 & \text{limit: } 1.6 \text{ lbs/MMBtu} \\
 & 1.6 \text{ lbs/MMBtu} \times \frac{0.000 \text{ Btu/gal}}{0 \text{ lbs/1000gal}} = \frac{0 \text{ lbs/1000gal}}{100.0 \text{ lbs/1000 gal}} = \underline{0.000} \\
 & \text{Sulfur content must be less than or equal to } \underline{0.000} \% \text{ to comply with 326 IAC 7} \\
 & \text{and to limit SO}_2 \text{ emissions to 100 tons per year or less.}
 \end{aligned}$$

D. The following calculations determine the maximum sulfur content of distillate #4 fuel oil allowable by 326-IAC 7:

$$\begin{array}{rclcl}
 \text{limit:} & 0.5 \text{ lbs/MMBtu} & & & \\
 & 0.5 \text{ lbs/MMBtu} \times & \underline{140000.000 \text{ Btu/gal}} = & 70 \text{ lbs/1000gal} & \\
 & 70 \text{ lbs/1000gal} / & \underline{142.0 \text{ lbs/1000 gal}} = & \underline{0.493} & \\
 & & \underline{0.493} \% \text{ to comply with 326 IAC 7} & &
 \end{array}$$

Sulfur content must be less than or equal to
and to limit SO2 emissions to 100 tons per year or less.

III. Limited Potential Emissions

FUEL USAGE LIMITATION: BASED ON NOx

FUEL USAGE LIMITATION FOR HOT OIL HEATER ALONE (OIL)

$$\begin{array}{rclcl}
 1.25 \frac{\text{tons NOx}}{\text{year}} & * & 2000 \frac{\text{lbs}}{\text{ton}} & = & 2502.86 \frac{\text{lbs NOx}}{\text{year}} \\
 2502.86 \frac{\text{lbs NOx}}{\text{year}} & / & 20 \frac{\text{lbs NOx}}{\text{kgal}} & = & 125.14 \frac{\text{kgal}}{\text{year}} \\
 125.14 \frac{\text{kgal}}{\text{year}} & * & \frac{99.00 \text{ tons/year}}{1.25142857143 \text{ tons/year}} & = & 0.0 \frac{\text{gal fuel}}{\text{year}}
 \end{array}$$

FUEL USAGE LIMITATION FOR BURNER & HEATER (Gas)

$$\begin{array}{rclcl}
 0.00 \frac{\text{tons NOx}}{\text{year}} & * & 2000 \frac{\text{lbs}}{\text{ton}} & = & 0 \frac{\text{lbs NOx}}{\text{year}} \\
 0 \frac{\text{lbs NOx}}{\text{year}} & / & 100.0 \frac{\text{lbs NOx}}{\text{MMcf}} & = & 0.00 \frac{\text{MMcf}}{\text{year}} \\
 0.00 \frac{\text{MMcf}}{\text{year}} & * & \frac{24.0 \text{ tons/yr}}{0.00 \text{ tons/yr}} & = & 0.0 \frac{\text{MMcf}}{\text{year}} \text{ FESOP Limit}
 \end{array}$$

FUEL USAGE LIMITATION FOR BURNER & HEATER (#2 Oil)

$$\begin{array}{rclcl}
 1.25 \frac{\text{tons NOx}}{\text{year}} & * & 2000 \frac{\text{lbs}}{\text{ton}} & = & 2502.86 \frac{\text{lbs NOx}}{\text{year}} \\
 2502.86 \frac{\text{lbs NOx}}{\text{year}} & / & 20 \frac{\text{lbs}}{1000 \text{ gal}} & = & 125.14 \frac{\text{kgal}}{\text{year}} \\
 125.14 \frac{\text{kgal}}{\text{year}} & * & \frac{99.0 \text{ tons/yr}}{1.25 \text{ tons/yr}} & = & 0.0 \frac{\text{kgal}}{\text{year}} \text{ FESOP Limit}
 \end{array}$$

FUEL USAGE LIMITATION FOR BURNER (#4 Oil)

$$\begin{array}{rclclcl}
 48.18 \frac{\text{tons NOx}}{\text{year}} & * & 2000 \frac{\text{lbs}}{\text{ton}} & = & 96360.00 \frac{\text{lbs NOx}}{\text{year}} \\
 96360.00 \frac{\text{lbs NOx}}{\text{year}} & / & 0.0 \frac{\text{lbs}}{1000 \text{ gal}} & = & 0.00 \frac{\text{kgal}}{\text{year}} \\
 0.00 \frac{\text{kgal}}{\text{year}} & * & \frac{99.0 \text{ tons/yr}}{48.18 \text{ tons/yr}} & = & 0.0 \frac{\text{kgal}}{\text{year}} \text{ FESOP Limit}
 \end{array}$$

FUEL USAGE LIMITATION FOR BURNER (Waste Oil)

$$\begin{array}{rclclcl}
 0.00 \frac{\text{tons NOx}}{\text{year}} & * & 2000 \frac{\text{lbs}}{\text{ton}} & = & 0.00 \frac{\text{lbs NOx}}{\text{year}} \\
 0.00 \frac{\text{lbs NOx}}{\text{year}} & / & 0.0 \frac{\text{lbs}}{1000 \text{ gal}} & = & 0.00 \frac{\text{kgal}}{\text{year}} \\
 0.00 \frac{\text{kgal}}{\text{year}} & * & \frac{99.0 \text{ tons/yr}}{0.00 \text{ tons/yr}} & = & 0.0 \frac{\text{kgal}}{\text{year}} \text{ FESOP Limit}
 \end{array}$$

FUEL USAGE LIMITATION: BASED ON SO2

FUEL USAGE LIMITATION FOR HOT OIL HEATER ON OIL

$$\begin{array}{rclclcl}
 4.44 \frac{\text{tons SO2}}{\text{year}} & * & 2000 \frac{\text{lbs}}{\text{ton}} & = & 8885.1428571 \frac{\text{lbs SO2}}{\text{year}} \\
 8885.1428571429 \frac{\text{lbs SO2}}{\text{year}} & / & 70.0 \frac{\text{lbs SO2}}{\text{kgal}} & = & 126.93 \frac{\text{kgal}}{\text{year}} \\
 126.9306122449 \frac{\text{kgal}}{\text{year}} & * & \frac{99.00 \text{ tons/year}}{4.44257142857 \text{ tons/year}} & = & 0.0 \frac{\text{gal fuel}}{\text{year}}
 \end{array}$$

FUEL USAGE LIMITATION FOR BURNER AND HOT OIL HEATER (Gas)

$$\begin{array}{rclclcl}
 0.000 \frac{\text{tons SO2}}{\text{year}} & * & 2000 \frac{\text{lbs}}{\text{ton}} & = & 0.00 \frac{\text{lbs SO2}}{\text{year}} \\
 0.00 \frac{\text{lbs SO2}}{\text{year}} & / & 0.6 \frac{\text{lbs SO2}}{\text{MMcf}} & = & 0.00 \frac{\text{MMcf}}{\text{year}} \\
 0.00 \frac{\text{MMcf}}{\text{year}} & * & \frac{99.0 \text{ tons/yr}}{0.00 \text{ tons/yr}} & = & 0.0 \frac{\text{MMcf}}{\text{year}} \text{ FESOP Limit}
 \end{array}$$

FUEL USAGE LIMITATION FOR BURNER & HEATER (#2 Oil)

$$\begin{array}{rclclcl}
 \frac{4.4 \text{ tons SO}_2}{\text{year}} & * & 2000 \frac{\text{lbs}}{\text{ton}} & = & 8885.14 \frac{\text{lbs SO}_2}{\text{year}} \\
 \\
 \frac{8885.14 \text{ lbs SO}_2}{\text{year}} & / & \frac{70.0 \text{ lbs}}{1000 \text{ gal}} & = & 126930.61224 \frac{\text{gal}}{\text{year}} \\
 \\
 126930.61 \frac{\text{gal}}{\text{year}} & * & \frac{99.0 \text{ tons/yr}}{4.44 \text{ tons/yr}} & = & 0.0 \frac{\text{gal}}{\text{year}} \text{ FESOP Limit}
 \end{array}$$

FUEL USAGE LIMITATION FOR BURNER (#4 Oil) See Below for calculation of #4 oil limit

$$\begin{array}{rclclcl}
 \frac{171.0 \text{ tons SO}_2}{\text{year}} & * & 2000 \frac{\text{lbs}}{\text{ton}} & = & 342078 \frac{\text{lbs SO}_2}{\text{year}} \\
 \\
 \frac{342078.00 \text{ lbs SO}_2}{\text{year}} & / & \frac{71.0 \text{ lbs}}{1000 \text{ gal}} & = & 4818000 \frac{\text{gal}}{\text{year}} \\
 \\
 4818000.00 \frac{\text{gal}}{\text{year}} & * & \frac{95.1 \text{ tons/yr}}{171.04 \text{ tons/yr}} & = & 2678873.2 \frac{\text{gal}}{\text{year}} \text{ FESOP Limit}
 \end{array}$$

SO2 limit of 100 TPY Minus 4.44 TPY PTE for Hot Oil Heater and 0.5 TPY estimate for insignificant activities = 95.1 TPY

FUEL USAGE LIMITATION FOR BURNER (Waste Oil)

$$\begin{array}{rclclcl}
 \frac{0.0 \text{ tons SO}_2}{\text{year}} & * & 2000 \frac{\text{lbs}}{\text{ton}} & = & 0.00 \frac{\text{lbs SO}_2}{\text{year}} \\
 \\
 \frac{0.00 \text{ lbs SO}_2}{\text{year}} & / & \frac{0.0 \text{ lbs}}{1000 \text{ gal}} & = & 0.00 \frac{\text{gal}}{\text{year}} \\
 \\
 \frac{0.00 \text{ gal}}{\text{year}} & * & \frac{99.0 \text{ tons/yr}}{0.00 \text{ tons/yr}} & = & 0.0 \frac{\text{gal}}{\text{year}} \text{ FESOP Limit}
 \end{array}$$

Summary of Limited and Controlled Emissions to Comply with the FESOP Limits

Fuel Limit for SO2 = 95.1/166.6 or 0.571 for all operations except the hot oil heater and the storage

	PM	PM10	SOx	NOx	VOC	CO	HAPs
Hot Oil Heater	0.125	0.206	4.443	1.251	0.021	0.313	
Dryer/burner	0.011	0.018	95.100	26.789	0.455	6.697	3.627
Batch Mixer	80.009	11.251					
Conveying	1.644	0.164					
Screening	18.745	1.874					
Storage	0.011	0.004					
Subtotal	100.55	13.52	99.54	28.04	0.48	7.01	3.63
Insignificant	1.00	1.00	0.40	2.00	3.00	1.00	1.00
Total	101.55	14.52	99.94	30.04	3.48	8.01	4.63